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EXAMINER

MILLER, BRANDON J

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/829,473	Applicant(s) LAPPETELAINEN ET AL.	
	Examiner BRANDON J. MILLER	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 11-23 and 26-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-23 and 26-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment/Remarks

Disposition of Claims

I. The indicated allowability of claims 5 and 12 are withdrawn in view of the rejection below under 35 U.S.C. 112, second paragraph. Claims 1-6, 11-23, and 26-36 are pending in the application

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

II. Claims 33-34 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 33-34 contain the limitation “a computer program embodied on a computer medium”. Claim 36 contains the limitation “a computer program, embodied on a computer-readable medium”. The limitations in claims 33-34 and 36 are not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation in claims 33-34 first appears in the amendment received 4/21/2008 and the limitation in claim 36 first

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appears in this amendment received 10/21/2008. However, because the amendments adding the limitations were over four years after the 4/22/2004 filing date of the application and the limitations are not recited or suggested anywhere else in the application as filed, the amendment constitutes new matter.

Applicant has responded to the 35 USC § 112, first paragraph rejection of claims 33-34 made in the office action with mail date 07/21/2008, by stating that “one of ordinary skill in the art would readily understand that an embodiment of the invention could be implemented using software applications, and that the software could be tangibly embodied on a computer readable medium” (see Response to Office Action, page 17 of 20, dated October 21, 2008).

However, there is no argument from the applicant regarding the lack of support for “a computer program embodied on a computer medium” and “a computer program, embodied on a computer-readable medium”. The definition for NEW MATTER is not about what one of ordinary skill in the art would readily understand; rather it is about subject matter in amended cases not disclosed in the original application as filed.

The following art rejection is based on the best possible interpretation of the claim language in light of the rejection under 35 U.S.C. 112, first paragraph.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

III. Claims 5 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 5 recites “communicating at least some of the proximity signaling parameters between the subscriber terminal and the at least one sub-terminal” in lines 6-7.

Claim 12 recites “configure the proximity signaling unit according to the at least some of the proximity signaling parameters” in lines 5-6.

The term "some" used in claims 5 and 12 is a relative term which renders the claim indefinite. The term "some" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 12 recites the limitation "the at least some" in line 6. There is insufficient antecedent basis for this limitation in the claim.

The following art rejection is based on the best possible interpretation of the claim language in light of the rejection under 35 U.S.C. 112, first paragraph.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

IV. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

V. Claims 1-4, 6, 11, 13-21, 23, 27, and 29-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ratert et al. (US 2004/0142684 A1) in view of Chen (US 7,010,268 B2).

Regarding claim 1 Ratert teaches connecting a subscriber terminal of a wireless telecommunication system to an infrastructure of the wireless telecommunications system over a wireless interface, the subscriber terminal holding a subscriber identity in the wireless telecommunications system (see paragraphs [0016] & [0023], radiotelephone 100 reads on subscriber terminal; and communication between radiotelephone 100 and telecommunications network reads on connecting subscriber terminal to infrastructure because for communication to occur a connection must first be made). Ratert teaches connecting the subscriber terminal to at least one sub-terminal over a proximity wireless interface, the at least one sub-terminal using the subscriber identity of the subscriber terminal (see paragraphs [0020] & [0025] and FIGs. 2 & 3).

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Ratert does not specifically teach requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal. Chen teaches requesting a radio link from a subscriber terminal, the radio link being directed from an infrastructure to at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 2 Ratert teaches generating at least some of the signaling parameters in the sub-terminal (see paragraph [0023] and FIG. 3).

Regarding claim 3 Chen teaches communicating at least some of the signaling parameters between the at least one sub-terminal and the infrastructure over a wireless interface between the infrastructure and the at least one sub-terminal (see col. 2, lines 30-36 & 41-43 and FIG. 1).

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Regarding claim 4 Chen teaches configuring the at least one sub-terminal to provide the radio link according to at least some of the signaling parameters (see col. 2, lines 30-36 & 41-43 and FIG. 1).

Regarding claim 6 Ratert teaches a system comprising a subscriber terminal and at least one sub-terminal, wherein the subscriber terminal comprises a connecting unit configured to connect the subscriber terminal to a infrastructure of a wireless telecommunications system and a subscriber identity unit configured to hold a subscriber identity of the subscriber terminal in the wireless telecommunications system (see paragraphs [0016], radiotelephone 100 reads on subscriber terminal and FIG. 2). Ratert teaches wherein the at least one sub-terminal uses the subscriber identity of the subscriber terminal and includes a receiving unit configured to provide a radio link directed from the infrastructure to the at least one sub-terminal, the radio link being controlled on the basis of signaling parameters (see paragraphs [0020] & [0021] and FIGs. 2 & 3). Ratert teaches wherein the system comprises a proximity signaling unit operationally connected to the signaling unit, configured to communicate at least one signaling parameter between the subscriber terminal and the at least one sub-terminal over a proximity wireless interface (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach wherein the subscriber terminal comprises a requesting unit operationally connected to the connecting unit configured to request a radio link directed from the infrastructure to the at least one sub-terminal; wherein the system comprises a signaling unit operationally connected to the connecting unit, configured to communicate at least one of a signaling parameters between the subscriber terminal and the infrastructure. Chen teaches wherein the subscriber terminal comprises a requesting unit operationally connected to the connecting unit configured to request

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a radio link directed from the infrastructure to the at least one sub-terminal; wherein the system comprises a signaling unit operationally connected to the connecting unit, configured to communicate at least one of a signaling parameters between the subscriber terminal and the infrastructure (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include wherein the subscriber terminal comprises a requesting unit operationally connected to the connecting unit configured to request a radio link directed from the infrastructure to the at least one sub-terminal; wherein the system comprises a signaling unit operationally connected to the connecting unit, configured to communicate at least one of a signaling parameters between the subscriber terminal and the infrastructure because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 11 Ratert teaches an apparatus comprising a connecting unit configured to connect the apparatus to an infrastructure of the wireless telecommunications system (see paragraphs [0016], radiotelephone 100 reads on subscriber terminal and FIG. 2). Ratert teaches a subscriber identity unit configured to hold a subscriber identity of the subscriber terminal in the wireless telecommunications system (see paragraph [0016]). Ratert teaches the at least one sub-terminal using the subscriber identity of the subscriber terminal, and a radio link being controlled on the basis of signaling parameters (see paragraphs [0020] & [0021] and FIGs. 2 & 3). Ratert teaches a proximity signaling unit configured to communicate at least one of the signaling parameters with the at least one sub-terminal over a proximity wireless interface (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach the apparatus

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requesting a radio link directed from the infrastructure to at least one sub-terminal; and communicating at least one of the signaling parameters between the subscriber terminal and the infrastructure. Chen teaches the apparatus requesting a radio link directed from the infrastructure to at least one sub-terminal; and communicating at least one of the signaling parameters between the subscriber terminal and the infrastructure (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include the apparatus requesting a radio link directed from the infrastructure to at least one sub-terminal; and communicating at least one of the signaling parameters between the subscriber terminal and the infrastructure because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 13 Ratert teaches an apparatus comprising a receiving unit configured to provide a radio link directed from an infrastructure of the wireless telecommunication system, to the apparatus (see paragraphs [0020] - [0021]). Ratert teaches the apparatus being operationally connected to the infrastructure and holding a subscriber identity in the wireless telecommunications system, the apparatus using the subscriber identity of a subscriber terminal (see paragraphs [0020] – [0021] and FIGs 2 & 3). Ratert teaches a proximity signaling unit configured to communicate at least some of the signaling parameters between the subscriber terminal and the sub-terminal over a proximity wireless interface (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach the radio link being controlled on the basis of signaling parameters communicated between the subscriber terminal and the infrastructure, the radio link being requested by the subscriber terminal. Chen teaches the radio

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link being controlled on the basis of signaling parameters communicated between the subscriber terminal and the infrastructure, the radio link being requested by the subscriber terminal (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include the radio link being controlled on the basis of signaling parameters communicated between the subscriber terminal and the infrastructure, the radio link being requested by the subscriber terminal because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 14 Ratert and Chen teach a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 15 Ratert and Chen teach a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 16 Ratert teaches configuring the receiving unit according to at least some of the signaling parameters (see paragraph [0020]).

Regarding claim 17 Ratert teaches the sub-terminal configuring the proximity signaling according to at least some of the proximity signaling parameters received from the subscriber terminal (see paragraph [0020]).

Regarding claim 18 Ratert teaches the subscriber terminal being connected to the infrastructure and the subscriber terminal holding the subscriber identity in the wireless telecommunications system see paragraphs [0016] & [0023], radiotelephone 100 reads on subscriber terminal; and communication between radiotelephone 100 and telecommunications network reads on connecting subscriber terminal to infrastructure because for communication to

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occur a connection must first be made). Ratert teaches the at least one sub-terminal using the subscriber identity of the subscriber terminal (see paragraphs [0020] - [0021] and FIGs 2 & 3). Ratert teaches at least one signaling parameters being communicated between the subscriber terminal and the at least one sub-terminal over a proximity wireless interface (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach an apparatus for controlling access of at least one sub-terminal to an infrastructure of a wireless telecommunications system on the basis of an access request from a subscriber terminal of the wireless telecommunications system; controlling the radio link directed from the infrastructure to at least one sub-terminal, the radio link being controlled on the basis of signaling parameters; and a signaling unit configured to communicate at least one of the signaling parameters between the infrastructure and the subscriber terminal. Chen teaches an apparatus for controlling access of at least one sub-terminal to an infrastructure of a wireless telecommunications system on the basis of an access request from a subscriber terminal of the wireless telecommunications system; controlling the radio link directed from the infrastructure to at least one sub-terminal, the radio link being controlled on the basis of signaling parameters; and a signaling unit configured to communicate at least one of the signaling parameters between the infrastructure and the subscriber terminal (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include an apparatus for controlling access of at least one sub-terminal to an infrastructure of a wireless telecommunications system on the basis of an access request from a subscriber terminal of the wireless telecommunications system; controlling the radio link directed from the infrastructure to at least one sub-terminal, the radio link being controlled on the

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basis of signaling parameters; and a signaling unit configured to communicate at least one of the signaling parameters between the infrastructure and the subscriber terminal because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 19 Ratert teaches controlling a radio link on the basis of signaling parameters generated in the sub-terminal (see paragraph [0023] and FIG. 3).

Regarding claim 20 Ratert and Chen teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 21 Ratert teaches controlling the wireless interface on the basis of signaling parameters and a second signaling unit for communicating at least some of the proximity signaling parameters with the subscriber terminal (see paragraph [0020] – [0021] and FIG. 2).

Regarding claim 23 Ratert teaches elements selected from a group comprising: admission control, and allocation of resources (see paragraph [0023]).

Regarding claim 27 Ratert teaches a device as recited in claim 23 and is rejected given the same reasoning as above.

Regarding claim 29 Ratert teaches a device as recited in claim 23 and is rejected given the same reasoning as above.

Regarding claim 30 Ratert teaches an apparatus comprising connecting the apparatus to an infrastructure of the wireless telecommunications system (see paragraphs [0016], radiotelephone 100 reads on subscriber terminal and FIG. 2). Ratert teaches a subscriber identity unit for holding a subscriber identity of the subscriber terminal in the wireless

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telecommunications system (see paragraph [0016]). Ratert teaches the at least one sub-terminal using the subscriber identity of the subscriber terminal, and a radio link being controlled on the basis of signaling parameters (see paragraphs [0020] & [0021] and FIGs. 2 & 3). Ratert teaches a proximity signaling for communicating at least one of the signaling parameters with the at least one sub-terminal over a proximity wireless interface (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach the apparatus requesting a radio link directed from the infrastructure to at least one sub-terminal; and communicating at least one of the signaling parameters between the subscriber terminal and the infrastructure. Chen teaches the apparatus requesting a radio link directed from the infrastructure to at least one sub-terminal; and communicating at least one of the signaling parameters between the subscriber terminal and the infrastructure (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include the apparatus requesting a radio link directed from the infrastructure to at least one sub-terminal; and communicating at least one of the signaling parameters between the subscriber terminal and the infrastructure because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 31 Ratert teaches an apparatus providing a radio link directed from an infrastructure of the wireless telecommunication system, to the apparatus (see paragraphs [0020] - [0021]). Ratert teaches the apparatus being operationally connected to the infrastructure and holding a subscriber identity in the wireless telecommunications system, the apparatus using the subscriber identity of a subscriber terminal (see paragraphs [0020] – [0021] and FIGs 2 & 3).

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Ratert teaches a proximity signaling communicating at least some of the signaling parameters between the subscriber terminal and the sub-terminal over a proximity wireless interface (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach the radio link being controlled on the basis of signaling parameters communicated between the subscriber terminal and the infrastructure, the radio link being requested by the subscriber terminal. Chen teaches the radio link being controlled on the basis of signaling parameters communicated between the subscriber terminal and the infrastructure, the radio link being requested by the subscriber terminal (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include the radio link being controlled on the basis of signaling parameters communicated between the subscriber terminal and the infrastructure, the radio link being requested by the subscriber terminal because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 32 Ratert teaches the subscriber terminal being connected to the infrastructure and the subscriber terminal holding the subscriber identity in the wireless telecommunications system see paragraphs [0016] & [0023], radiotelephone 100 reads on subscriber terminal; and communication between radiotelephone 100 and telecommunications network reads on connecting subscriber terminal to infrastructure because for communication to occur a connection must first be made). Ratert teaches the at least one sub-terminal using the subscriber identity of the subscriber terminal (see paragraphs [0020] - [0021] and FIGs 2 & 3). Ratert teaches at least one signaling parameters being communicated between the subscriber

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terminal and the at least one sub-terminal over a proximity wireless interface (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach an apparatus for controlling access of at least one sub-terminal to an infrastructure of a wireless telecommunications system on the basis of an access request from a subscriber terminal of the wireless telecommunications system; controlling the radio link directed from the infrastructure to at least one sub-terminal, the radio link being controlled on the basis of signaling parameters; and a signaling unit configured to communicate at least one of the signaling parameters between the infrastructure and the subscriber terminal. Chen teaches an apparatus for controlling access of at least one sub-terminal to an infrastructure of a wireless telecommunications system on the basis of an access request from a subscriber terminal of the wireless telecommunications system; controlling the radio link directed from the infrastructure to at least one sub-terminal, the radio link being controlled on the basis of signaling parameters; and a signaling unit configured to communicate at least one of the signaling parameters between the infrastructure and the subscriber terminal (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include an apparatus for controlling access of at least one sub-terminal to an infrastructure of a wireless telecommunications system on the basis of an access request from a subscriber terminal of the wireless telecommunications system; controlling the radio link directed from the infrastructure to at least one sub-terminal, the radio link being controlled on the basis of signaling parameters; and a signaling unit configured to communicate at least one of the signaling parameters between the infrastructure and the subscriber terminal because Ratert

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teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 33 Ratert teaches connecting a subscriber terminal of a wireless telecommunication system to an infrastructure of the wireless telecommunications system over a wireless interface, the subscriber terminal holding a subscriber identity in the wireless telecommunications system (see paragraphs [0016] & [0023], radiotelephone 100 reads on subscriber terminal; and communication between radiotelephone 100 and telecommunications network reads on connecting subscriber terminal to infrastructure because for communication to occur a connection must first be made). Ratert teaches connecting the subscriber terminal to at least one sub-terminal over a proximity wireless interface, the at least one sub-terminal using the subscriber identity of the subscriber terminal (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach a computer program; requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal. Chen teaches computing device (see col. 1, lines 19-20). Chen teaches requesting a radio link from a subscriber terminal, the radio link being directed from an infrastructure to at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include requesting a radio link from the subscriber terminal,

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the radio link being directed from the infrastructure to the at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 34 Ratert teaches wherein the control of the radio link is admission control, or allocation of radio resources (see paragraph [0022]).

Regarding claim 35 Ratert teaches connecting a subscriber terminal to an infrastructure over a wireless interface, the subscriber terminal holding a subscriber identity in the wireless telecommunications system (see paragraphs [0016] & [0023], radiotelephone 100 reads on subscriber terminal; and communication between radiotelephone 100 and telecommunications network reads on connecting subscriber terminal to infrastructure because for communication to occur a connection must first be made). Ratert teaches connecting the subscriber terminal to at least one sub-terminal over a proximity wireless interface, the at least one sub-terminal using the subscriber identity of the subscriber terminal (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach requesting a radio link, at the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal. Chen teaches requesting a radio link from a subscriber terminal, the radio link being directed from an infrastructure to at least one sub-terminal; generating signaling parameters for controlling the

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radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

Regarding claim 36 Ratert teaches connecting a subscriber terminal to an infrastructure over a wireless interface, the subscriber terminal holding a subscriber identity in the wireless telecommunications system (see paragraphs [0016] & [0023], radiotelephone 100 reads on subscriber terminal; and communication between radiotelephone 100 and telecommunications network reads on connecting subscriber terminal to infrastructure because for communication to occur a connection must first be made). Ratert teaches connecting the subscriber terminal to at least one sub-terminal over a proximity wireless interface, the at least one sub-terminal using the subscriber identity of the subscriber terminal (see paragraphs [0020] & [0025] and FIGs. 2 & 3). Ratert does not specifically teach a computer program, embodied on a computer-readable medium; and requesting a radio link, at the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between

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the sub-terminal and the infrastructure via the subscriber terminal. Chen teaches computing device (see col. 1, lines 19-20). Chen teaches requesting a radio link from a subscriber terminal, the radio link being directed from an infrastructure to at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal (see col. 2, lines 30-36 & 41-43 and FIG. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device in Ratert adapt to include a computer program, embodied on a computer-readable medium; and requesting a radio link from the subscriber terminal, the radio link being directed from the infrastructure to the at least one sub-terminal; generating signaling parameters for controlling the radio link; and communicating at least one of the signaling parameters between the sub-terminal and the infrastructure via the subscriber terminal because Ratert teaches that the connection parameters are transferred to the sub-terminal and the devices in Ratert are functionally capable of transferring them from the infrastructure as taught in Chen.

VI. Claims 22, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ratert et al. (US 2004/0142684 A1) in view of Chen (US 7,010,268 B2) and deTorbal (US 2004/0058678 A1).

Regarding claim 22 Ratert and Chen teach a device as recited in claim 1 except for generating a handover request to the sub-terminal in the subscriber terminal in order to perform simultaneous handovers of the subscriber terminal and the sub-terminal. deTorbal teaches generating a handover request in a subscriber terminal and performing simultaneous handovers

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of multiple subscriber terminals (see paragraph [0020]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include generating a handover request to the sub-terminal in the subscriber terminal in order to perform simultaneous handovers of the subscriber terminal and the sub-terminal because the subscriber terminals in Ratert hand over communication from one terminal to the other and the devices are capable of communicating handover requests using the communication links.

Regarding claim 26 Ratert, Chen, and deTorbal teach a device as recited in claim 22 and is rejected given the same reasoning as above.

Regarding claim 28 Ratert, Chen, and deTorbal teach a device as recited in claim 22 and is rejected given the same reasoning as above.

Response to Arguments

VII. Applicant's arguments with respect to claims 1-6, 11-23, and 26-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

VIII. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Aldermeshian et al. Patent Number: 5,745,850 discloses an apparatus and method for mobile (E.G. cellular or wireless) telephone call handover and impersonation.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON J. MILLER whose telephone number is (571)272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Supervisory Patent Examiner, Art Unit 2617

January 12, 2009

/Brandon J Miller/
Examiner, Art Unit 2617